

REMARKS

Reconsideration and allowance of the present application are respectfully requested in light of the preceding amendments and following remarks. Claims 1-3, 5-17 and 19-24 are pending in this application. By this Amendment, claims 1 and 14 are amended, and claims 4 and 18 are cancelled. By this Amendment, no claims are added. Claims 1 and 14 are independent claim.

Rejections under 35 U.S.C. §102 - Parantainen

Claims 1-3 and 14-17 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 7,092,373 ("Parantainen"). This rejection is respectfully traversed.

In Applicants' April 2, 2008 Amendment, Applicants argued that Parantainen fails to disclose "transmitting control signal data over a downlink control channel shared by a plurality of user" as recited in the independent claim 1 (independent claim 14 contains similar features). Rather, Parantainen discloses providing uplink control information on a shared uplink control channel, to at least two TBFs (users), and that downlink transmissions take place on a dedicated channel. Furthermore, Applicants argued that Parantainen fails to disclose "the downlink control channel including timeslots, each timeslot including fields identifying one of the plurality of user, each field including control signal data for the identified user for controlling uplink transmission of packet data by the identified user" as recited in the independent claims. For instance, the TFI-A through TFI-C of Parantainen are not fields within the meaning of the independent claims, but rather an indicator used to identify timeslots having a similar association.

In response to Applicants' April 2, 2008 Amendment, the Examiner asserts that "this downlink transmission is dedicated transmission for a specific mobile user because only this specific mobile user should be receiving packet data. The downlink control channel identified which uplink timeslots are to be used by a mobile station which is shared by a plurality of mobile users..." See Office Action, page 2. Furthermore, the Examiner asserts that the TFI is "a field within a timeslot which identified which timeslot should be used for uplink transmission." See Office Action, page 2.

Applicants still disagree. First, the TFI of Parantainen does not appear to identify a user (e.g., a mobile phone), but rather a temporary block flow (TBF) where uplink time slots are allocated for different TBFs by using the TFI number. For example, a temporary block flow TBF-A is identified with TFI = 9 and TN = 1. See Parantainen, column 10, lines 14-29.

None-the-less, to expedite prosecution and without conceding to the Examiner's current position, Applicants have amended claim 1 to include the limitations of claim 4. Amended claim 1 recites, inter alia, "wherein the control signal data in each field includes acknowledgment/negative acknowledgment of a packet transmitted by a user and an indicator related to a transmit rate at which the user is to transmit in the uplink." (previously recited in cancelled claim 4). The Examiner acknowledges that Parantainen does not disclose this feature, but relies upon U.S. Patent No. 7,088,683 ("Sawada") as disclosing this feature.

Applicant disagree and submit that Sawada does not disclose this feature. For instance, in Sawada, the control signal data in each field does not include acknowledgment/negative acknowledgment of a packet and an indicator related to a

transmit rate, as required by amended claim 1. Rather, Sawada discloses that a mobile terminal 2 sends a control signal to the stationary terminal 1 (e.g., on the uplink channel). The control signal information includes information regarding the number of sub-carriers and a transmission rate. Then, the mobile terminal 2 sends a large amount of data (DATA) to the stationary terminal 1. In response, the stationary terminal 1 sends back an ACK signal to the mobile terminal 2 when the stationary terminal 1 accurately received the DATA.

First, Sawada does not appear to send control signal data in each field, where each field relates to a plurality of users. Rather, only one mobile terminal (e.g., mobile terminal 2) sends information regarding the number of sub-carriers and a transmission rate corresponding to that one mobile terminal. Also, the control signal information of Sawada is sent on the uplink, not the downlink.

Second, the system of Sawada appears to send control signal information and acknowledgment information separately. In other words, the control signal information and acknowledgment information of Sawada are sent at separate times. For instance, the stationary terminal 1 sends back an ACK signal to the mobile terminal 2 when the stationary terminal 1 accurately received the DATA. This ACK signal of Sawada does not contain the control signal information. Therefore, Sawada and Parantainen, alone or in combination, cannot disclose “wherein the control signal data in each field includes acknowledgment/negative acknowledgment of a packet transmitted by a user and an indicator related to a transmit rate at which the user is to transmit in the uplink” as recited in amended claim 1. Therefore, amended claim 1 is patentable.

Claim 14 has been amended to include features similar to amended claim 1, and is patentable for at least the same reasons stated above. Furthermore, claims 1-3 and 14-17, dependent on amended claims 1 and 14 are patentable for at least the same reasons stated above.

Therefore, Applicant respectfully requests that this art ground of rejection of these claims under 35 U.S.C. §102 be withdrawn.

Rejections under 35 U.S.C. §103

Parantainen in view of Sawada

Claims 4-7, 18 and 20-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Parantainen in view of U.S. Patent No. 7,088,683 ("Sawada"). Claims 4 and 18 have been cancelled. Claims 5-7 and 20-22, dependent on amended claims 1 and 14, are patentable for at least the same reasons stated above. Therefore, Applicant respectfully requests that this art ground of rejection of these claims under 35 U.S.C. §103 be withdrawn.

Parantainen in view of Tiedemann

Claims 8 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Parantainen in view of U.S. Patent No. 70,054,293 ("Tiedemann"). Claims 8 and 19, dependent on amended claims 1 and 14, are patentable for at least the same reasons stated above. Furthermore, Tiedemann fails to cure the deficiencies of Parantainen. Therefore, Applicant respectfully requests that this art ground of rejection of these claims under 35 U.S.C. §103 be withdrawn.

Parantainen in view of Sawada and further in view of Gardner

Claims 9 and 23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Parantainen in view of Sawada as applied to claims 6 and 21 above, and further in view of Gardner et al. (U.S. Patent No. 7,146,174, hereinafter "Gardner"). Claims 9 and 23, dependent on amended claims 1 and 14, are patentable for at least the same reasons stated above. Furthermore, Gardner fails to cure the deficiencies of Parantainen and Sawada. Therefore, Applicant respectfully requests that this art ground of rejection of these claims under 35 U.S.C. §103 be withdrawn.

Parantainen in view of Sawada and in further view of Tiedemann

Claims 10-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Parantainen in view of Sawada and in further view of Tiedemann. Claims 10-12, dependent on amended claim 1, are patentable for at least the same reasons stated above. Therefore, Applicant respectfully requests that this art ground of rejection of these claims under 35 U.S.C. §103 be withdrawn.

Parantainen in view of Proctor

Claims 13 and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Parantainen in view of Proctor, Jr. (U.S. Patent No. 7,218,623, hereinafter "Proctor"). Claims 13 and 24, dependent on amended claims 1 and 14, are patentable for at least the same reasons stated above. Furthermore, Proctor fails to cure the deficiencies of Parantainen. Therefore, Applicant respectfully requests that this art ground of rejection of these claims under 35 U.S.C. §103 be withdrawn.


CONCLUSION

In view of the above remarks and amendments, Applicant respectfully submits that each of the rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,
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By 
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